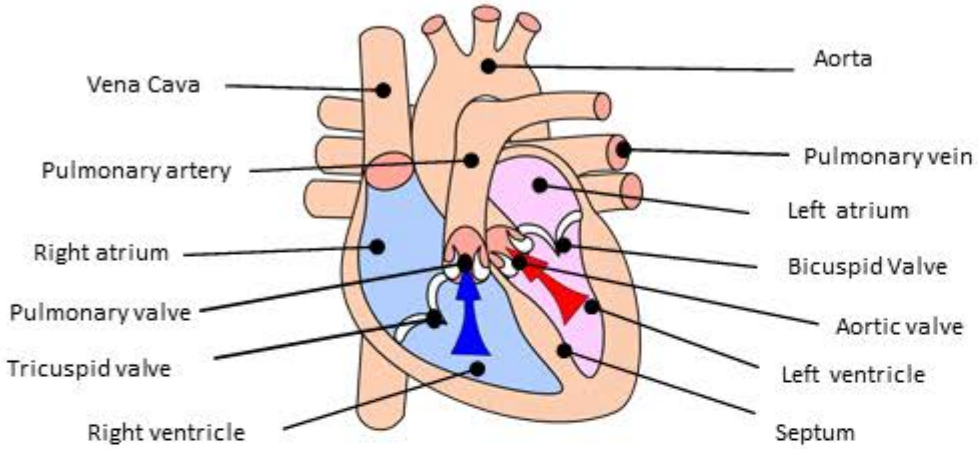
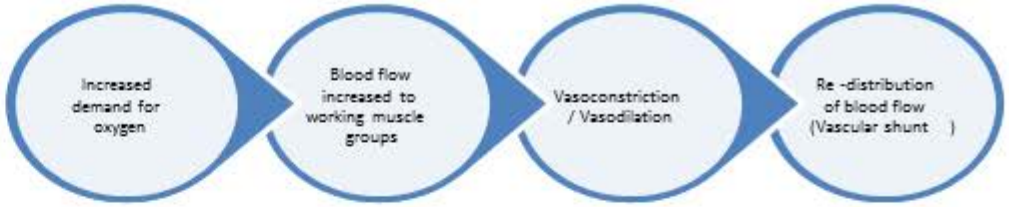
TURTON SCHOOL YEAR 10 PE KNOWLEDGE ORGANISER – TOPIC 1.2.1/2/3/4/5: CARDIOVASCULAR SYSTEM

Deoxygenated blood = **BLUE** (Right side) Oxygenated = **RED** (Left side)



Vascular Shunting



Vasoconstriction –NARROWING

Vasodilation -EXPANDING

Function of the cardiovascular system

1. Transport of oxygen, carbon dioxide and nutrients
2. Clotting of open wounds
3. Regulation of body temperature

Arteries	Veins	Capillaries
1. Away from the heart 2. Oxygenated blood (except pulmonary artery) 3. Thick/elastic walls 4. High pressure	1. Back to the heart 2. Deoxygenated blood (except pulmonary vein) 3. Thin walls + larger lumen 4. Lower pressure 5. Valves	1. In the tissue 2. Site of gaseous exchange 3. Very thin walls

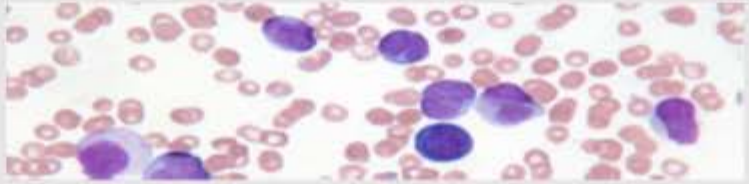
Components of blood-Red blood cells

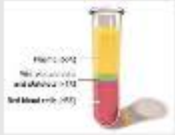
Carry oxygen from the lungs to the working muscles + Removes CO_2.

Haemoglobin binds the oxygen.

White blood cells

Are part of the immune system and **fight disease** and infection.



Platelets & Plasma

Platelets **clot blood** and form a scab around the site of injury. Plasma is the **liquid/fluid** part of blood that allows it to flow.